

REMARKS

Claims 1-22 were rejected. Applicant amends claim 1 to incorporate the elements of now canceled claim 7 and amends claim 18 to correct a typographical error. Claim 1 now has substantially the same scope as original claim 7. Applicant cancels claims 7 and 22-40. Applicant also amends the specification to address the objection under 37 CFR 1.84(p)(5). Only claim 1 is in independent form.

Claims 1-6, 13-14, and 22 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Application Publication 2003/0009215 ("Mayer"). Claim 1 has been amended to have substantially the same scope as now-canceled claim 7, which was not rejected over Mayer. Claim 22 has been canceled. In light of the amendments to the claims, the rejection over Mayer is now moot.

Claims 1-9 and 15-20 were further rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent 5,888,201 ("Stinson"). Claims 1-8 and 12 were rejected under 35 U.S.C. § 102(b) as anticipated by Japanese Patent Publication 11-042283 ("Duerig"). Stinson and Duerig, however, disclose self-expanding stents, whereas the claims require "balloon-expandable medical stents."

The undersigned thanks Examiner Roe for the courtesies extended during the telephonic interview on February 9, 2006. During the Interview, differences between balloon-expandable and self-expanding stents were discussed. Examiner Roe indicated that he interpreted "balloon-expandable medical stent" to merely require that the stent be capable of expansion by a balloon. This is an improper interpretation of the term "balloon-expandable medical stent." In the medical and stent industry, "balloon-expandable" and "self-expanding" are two mutually exclusive terms of art. Self-expanding stent materials are strong and springy while balloon-expandable stent materials are soft and ductile. Balloon-expandable stents require a mechanical device to expand the stent diameter, while self-expanding stents utilize stored mechanical energy in the stent itself to expand. A balloon-expandable stent material has to be able to undergo large permanent deformations to change size, while a self-expandable stent material undergoes elastic (reversible, non-permanent) deformation, much like a spring. Self-expandable stent materials typically have high yield strength (usually about 150 ksi or greater) so that they are not plastically deformed during expansion, while balloon-expandable stent materials have lower

yield strength (such as about 20-90 ksi) such that the applied mechanical stress exceeds the yield strength, causing the metal to permanently deform. A reading of the "Historical Overview" section of *Coronary Stenting - Current Perspectives*, which is attached, clearly differentiates balloon-expandable stents from self-expanding stents. (*Coronary Stenting - Current Perspectives - A Companion to the Handbook of Coronary Stents*, Michael JB Kutryk & Patrick Serruys, 1999, p. 1-16). Because none of the cited references discloses a balloon-expandable medical stent, the rejections must be withdrawn.

No agreement was reached during the interview. The Examiner, however, did indicate that he would give full consideration to the undersigned's arguments. Applicant again thanks the Examiner for taking the time to interview this case.

We turn now to a discussion of the individual rejections. The office action rejected claims 1-9 and 15-20 under 35 U.S.C. 102(b) as being anticipated by Stinson. Stinson does not disclose a "balloon-expandable medical stent," but instead discloses "a tubular, radially compressible, axially flexible and radially self-expandable structure including at least one elongate filament formed in a braid-like configuration." (Stinson, col. 2, lines 44-47). Accordingly, the rejection of claims 1-9 and 15-20 as anticipated by Stinson must be withdrawn.

The office action also rejects claims 1-8 and 12 under 35 U.S.C. § 102(b) as anticipated by Duerig. Duerig also does not disclose a "balloon-expandable medical stent." Duerig instead discloses a stent "made of a shape memory alloy which is treated to manifest high elasticity having an inflection point in a stress-strain curve under a load so that the body can be deformed inward and formed into a horizontally compressed shape to be inserted into the lumen, and then, returned to the original shape to support the lumen in contact therewith." This, again, is the definition of a self-expanding stent. Furthermore, the "shape memory alloy" disclosed by Duerig would not allow for a permanent deformation during implementation; thus the Duerig stent is not a "balloon-expandable medical stent" as the term is used in the art. Accordingly, the rejection of claims 1-8 and 12 as anticipated by Duerig must be withdrawn. Claims 10, 11, and 21 further stand rejected under 35 U.S.C. § 103(a) as unpatentable over Duerig in combination with U.S. Patent 4,040,129 ("Steinemann"), "Thermomechanical Analysis of Ti40Ta and Ti50Ta Alloys", or U.S. Patent 6,146,404 ("Kim"). None of these secondary references discloses balloon-expandable stents. Therefore, these rejections should be withdrawn as well.

The rejection of claims 1-6, 13-14, and 22 as anticipated by Mayer is now moot because claim 1 has been amended to have substantially the same scope as now-canceled claim 7 and because claim 22 is now canceled.

Each of the pending claims 1-6 and 8-21 define patentable subject matter over the cited prior art. Furthermore, each of the pending claims is believed to be in condition for allowance. As such, Applicant requests that the Examiner allow pending claims 1-6 and 8-21.

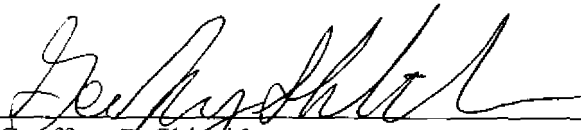
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

The Commissioner is authorized to apply the amount of \$120 for the Petition for a One-Month Extension of Time fee, and apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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3/6/2007


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